

APPENDIX C. U.S. FISH & WILDLIFE SERVICE LETTER and OTHER LETTERS



FILE COPY
United States Department of the Interior



FISH AND WILDLIFE SERVICE
BLOOMINGTON FIELD OFFICE (ES)
620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261 FAX (812) 334-4273

January 21, 2004

Mr. Robert Waltz
Indiana DNR, Division of Entomology and Plant Pathology
402 West Washington Street, Room 290
Indianapolis, Indiana 46204

Dear Mr. Waltz:

The U.S. Fish and Wildlife Service (FWS) has reviewed your letter of December 19, 2003 regarding a gypsy moth treatment program for 39 sites in 13 Indiana counties (Allen, Dekalb, Elkhart, Kosciusko, LaGrange, Lake, LaPorte, Marshall, Noble, Porter, St. Joseph, Scott, Whitley). We are submitting the following comments on the year 2004 program.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The plan submitted in your original letter included spraying of Dimilin at 9 sites, however, based upon our telephone conversation of January 16, 2004 with Phil Marshall, Dimilin has been eliminated from the 2004 program. We have additional concerns about the use of Dimilin due to its impact on a wide range of non-target insect species, whereas Bt's impact is limited to Lepidopterans. If Dimilin is proposed for future use, the concerns for federally listed butterflies will be applicable to it as well. Additional considerations will be required for endangered species and migratory birds whose forage base is composed mostly or entirely of insects.

Endangered butterflies

One of the proposed treatment methods, spraying with Bacillus thuringensis (Bt), is of concern for 2 federally endangered species of Lepidoptera in Indiana, the Karner blue butterfly (Lycæides melissa samueulis) and Mitchell's satyr butterfly (Neonympha mitchellii). The known occurrences of these 2 endangered species are in the northern portions of Lake and Porter Counties (Karner blue), and isolated locations in LaPorte and LaGrange Counties (Mitchell's satyr). The range of these species has not changed

since our review of the 2003 gypsy moth program. Neither species is known to occur near the sites identified in your letter. Aerial spraying of Bt will occur at 23 of the sites, including core areas within larger sites at Middlebury and Elkhart. The remainder of the sites will be treated with Disrupt II pheromone flakes, which are considered to be highly specific for gypsy moths with no adverse impacts on the federally listed butterflies.

Other Endangered Species

The proposed treatment sites are within the range of the federally endangered Indiana bat (Myotis sodalis), and federally threatened bald eagle (Haliaeetus leucocephalus) and copperbelly watersnake (Nerodia erythrogaster neglecta). We do not anticipate impacts on the forage base of bald eagles or copperbelly water snakes from any treatments at this time. Both species' diets consists mainly of vertebrates, and the current literature has not show significant biomagnification of Dimilin within food chains. Future research may provide additional information on this subject.

Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Prior to hibernation, Indiana bats feed intensively in forested areas near hibernacula in order to build up adequate fat reserves to survive hibernation.

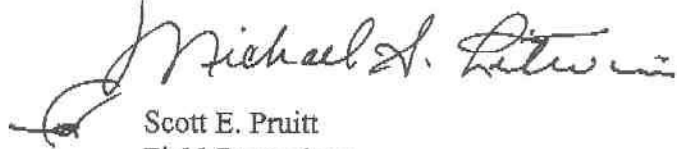
The diet of Indiana bats consists entirely of insects. There is insufficient literature on the species composition of their diet to be definitive, however based on previous studies they appear to be somewhat opportunistic feeders. Some studies have found lepidopterans as a major dietary component, while others found a diet dominated by aquatic insects. Most of these studies were essentially "snapshots" and there is a lack of comprehensive, long-term studies. It is possible that under some circumstances extensive elimination of a broad range of lepidopteran species over a large habitat area has the potential to adversely affect the food base of an Indiana bat nursery colony. This concern increases greatly with the use of Dimilin because it kills a much broader range of insects. Since the current Bt spraying program is limited to relatively small areas of Indiana bat habitat, and the link between loss of a lepidopteran forage base and adverse effects on the species is uncertain, we conclude that the 2004 program is not likely to adversely affect any of these listed species. If future programs incorporate Dimilin, or involve BT spraying, over large areas of Indiana bat summer or winter habitat (or expand into the range of the federally endangered gray bat (*M. grisescens*), this issue will have to be reevaluated.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If, however, new information on endangered species at the site becomes available or if project plans are changed significantly, please contact our office for further consultation.

Some of the sites in Porter County overlap with the Indiana Dunes National Lakeshore and Indiana Dunes State Park. We recommend that you coordinate with the National Park Service and the Indiana Department of Natural Resources regarding these properties.

For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Michael S. Litwin", is written over the typed name "Scott E. Pruitt".

Scott E. Pruitt
Field Supervisor

cc: Christie Kiefer, Indiana Division of Fish and Wildlife, Indianapolis, IN
Katie Smith, Indiana Division of Fish and Wildlife, Indianapolis, IN
USFWS, Chesterton, IN
Phillip Marshall, IDNR, PO Box 218, Valleria, IN 47281

ES: MLitwin/332-4261/January 21, 2004

THIS IS NOT A PERMIT

**State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Water**

Early Coordination/Environmental Assessment

DNR #: ER-10607 **Request Received:** December 22, 2003

Requestor: *Indiana Department of Natural Resources
Bob Waltz
Division of Entomology & Plant Pathology
402 West Washinton Street, W290
Indianapolis, IN 46204

Project: 2004 Proposed Gypsy Moth Treatment Sites

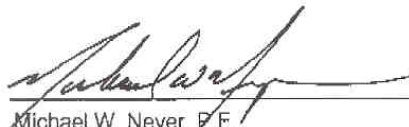
County/Site info: Allen - Dekalb - Elkhart - Kosciusko - Lagrange - Lake - LaPorte - Marshall - Noble -
Porter - Scott - St. Joseph - Whitley

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Natural Heritage Database: The Natural Heritage Program's data have been checked. Overall, the approach to use mating disruption pheromone flakes, as opposed to Btk or Dim, in areas with large amounts of natural habitat seems wise. Although we have very little data on lepidopterans within the treatment areas, we know from surveys in similar habitats elsewhere that rare butterflies and moths do use these habitats. The proposed treatment sites that contain large amounts of habitat include: Northern Allen County, South West Dekalb, Middlebury, Pinhook Bog, and South Bend West. Within the Northern Allen County Site, there is one nested Btk treatment area, but it is located sufficiently distant from the Cedar Creek Valley so as to pose no obvious threat to any native lepidopterans. Within the Middlebury Treatment Block, there are two nested Btk treatment areas, one of which adjoins the east end of the Wolf Lake Natural Area. We have some concerns for impacts to native lepidopterans at this location, but have no documented occurrences of any rare species in the area. The Indiana Dunes National Lakeshore land has a documented occurrence of the federal endangered Karner Blue Butterfly. The Crisman treatment site is located southeast of this area. Care should be taken to avoid any impacts to this endangered butterfly.

Fish & Wildlife Comments: The impacts of this gypsy moth control effort are impossible to predict. However, the devastating effects of uncontrolled gypsy moth infestations are well documented, and we believe that any potential harm to state and federal listed species resulting from the proposed control measures is less than the potential harm to these same species from an uncontrolled gypsy moth infestation.

Contact Staff: Christie L. Kiefer, Environ. Coordinator, Environmental Unit
Our agency appreciates this opportunity to be of service. Please do not hesitate to contact the above staff member at (317) 232-4160 or 1-877-928-3755 (toll free) if we can be of further assistance.



Michael W. Neyer, P.E.
Director
Division of Water

Date: February 19, 2004



Indiana Department of Natural Resources

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.state.in.us

Frank O'Bannon, Governor
John Goss, Director



January 12, 2004

Bob Waltz
Division of Entomology & Plant Pathology
Indiana Department of Natural Resources
402 West Washington Street, Room W290
Indianapolis, Indiana 46204

Federal Agency: U.S. Department of Agriculture

State Agency: Division of Entomology & Plant Pathology, Indiana Department of Natural Resources

Re: Gypsy moth eradication program for 2004

Dear Mr. Waltz:

Pursuant to Indiana Code 14-21-1-18 the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology ("DHPA") has conducted an analysis of the materials provided with your letter dated December 19, 2003, and received by the DHPA on December 22, 2003, for the above indicated project in Allen, DeKalb, LaPorte, Noble, Scott, LaGrange, Elkhart, Whitley, Porter, Marshall, Lake, Kosciusko and St. Joseph counties, Indiana. Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the same materials.

Refer to the following comments provided pursuant to Indiana Code 14-21-1-18:

As far as archaeology is concerned, the area in question has been extensively disturbed by modern development. Given this, it is very unlikely that significant archaeological resources would still exist within your project area. However, if any archaeological artifacts or human remains are uncovered during construction, state law (Indiana Code 14-21-1) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days.

We are not aware of any architectural sites or structures within the project area that are listed in the National Register of Historic Places, the Indiana Register of Historic Sites and Structures, or that might otherwise be considered historic as the term is used in Indiana Code 14-21-1-18.

In conclusion, it appears to us, based on what we currently know, that a certificate of approval will not be necessary for alterations to any known, historically or architecturally significant structures or sites.

Refer to the following comments provided pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800:

Based upon the documentation available at Indiana SHPO, we have not identified any historic buildings, structures, districts, objects, or archaeological resources listed in or eligible for inclusion in the National Register within the probable area of potential effects.

This information has been provided to assist the U.S. Department of Agriculture with the identification of historic properties. Upon completion of the remainder of its identification and evaluation efforts in 36 C.F.R. § 800.4 (a-c), the U.S. Department of Agriculture may analyze the information that has been gathered and proceed to consider the effects on historic properties. Thereafter, the U.S. Department of Agriculture will need to notify the Indiana SHPO and other appropriate parties of the results of its identification and evaluation efforts and its views on whether historic properties may or may not be affected with the appropriate documentation as stated in 36 C.F.R. § 800.4(d). Refer to the following comments:


An Equal Opportunity Employer
Printed on Recycled Paper

- 1) If the U.S. Department of Agriculture believes that a determination of "no historic properties affected" accurately reflects its assessment, then it shall provide documentation of its finding as set forth in 36 C.F.R. § 800.11(d) to the Indiana SHPO, notify all consulting parties, and make the finding with supporting documentation available for public inspection (36 C.F.R. §§ 800.4[d][1] and 800.2[d][2]).
- 2) If, on the other hand, the U.S. Department of Agriculture finds that an historic property may be affected, then it shall notify the Indiana SHPO, the public and all consulting parties of its finding and seek views on effects in accordance with 36 C.F.R. §§ 800.4(d)(2) and 800.2(d)(2). Thereafter, the U.S. Department of Agriculture may proceed to apply the criteria of adverse effect and determine whether the project will result in a "no adverse effect" or an "adverse effect" in accordance with 36 C.F.R. § 800.5.

We look forward to receiving notification of the U.S. Department of Agriculture's findings.

A copy of the revised 36 C.F.R. Part 800 that went into effect on January, 11, 2001, may be found on the Internet at www.achp.gov for your reference. If you have questions about the comments provided above, please call our office at (317) 232-1646. You may direct any questions concerning historic buildings or structures pertaining to this project to Karie A. Brudis. Questions pertaining to archaeological issues should be directed to Bill Mangold.

Very truly yours,



Jon C. Smith
Deputy State Historic Preservation Officer

JCS:WLM:KAB:kab

Date: 04/27/2004

NATIONAL PARK SERVICE
Integrated Pest Management

Page 1 of 2

Proposal: INDU-2004-015

Region: GLSO - GREAT LAKES SSO

State: IN - INDIANA

Proposal Created: 02/10/2004 Last Updated: 02/17/2004 Submitted for Review: 02/10/2004
Status: ^{Concur} NOT REVIEWED Official: Carol D. Salvo Status Assigned: 4-23-2004

Pest 1: GYPSY MOTH

Pest 2: <NONE SELECTED>

Pest 3: <NONE SELECTED>

Type: OTHER

Herbicide: <NONE SELECTED>

Product Name: DISRUPT II
Product EPA Number: 8730-55
Manufacturer: HERCON

Purpose: FOREST PROTECTION
Method: AERIAL
Primary Site: FOREST
Secondary Site: <NONE SELECTED>
Start Month: JUNE End Month: JULY

Acres: 75.00000000
Square Feet: 3,267,000.0000

Will this pesticide be applied to a cultural zone? N
Name of cultural manager coordinated with: RANDY KNUTSON
Will this pesticide be applied to a natural zone? Y
Will this pesticide be applied to a special zone? N
Will this pesticide be applied to a developed zone? Y
Are any of the pests to be managed exotic species? Y
Will multiple applications be required during the year? N
Was the application of the pesticide approved last year? N
Is the product classified by EPA a 'restricted user'? N
Is there potential impact on Threatened/Endangered species? N
Will the pesticide be applied to a body of water? N
Does the park monitor population trends of the pest(s)? Y
Is there an established population threshold? Y
Have non chemical control methods been attempted? Y

Date: 04/27/2004

NATIONAL PARK SERVICE
Integrated Pest Management

Page 2 of 2

Proposal: INDU-2004-015

Region: GLSO -- GREAT LAKES SSO

State: IN -- INDIANA

Year of last approved IPM plan: 1985
IPM Contact: RANDY KNUITSON
Phone: 219-926-7561 x334

Was this product applied during the previous year? N

Does the value in the Amount Applied box represent
the total product applied during the proposed year? N

Unit: <NONE SELECTED> Amount Applied: 0.0000

Actual area treated:

Acres	0.00000000
Square Feet	0.0000

Active Ingredients

Code	Name	Convert	Total Lbs Applied
PHEROM	PHEROMONE	.17	<NA>

Notes/Memo